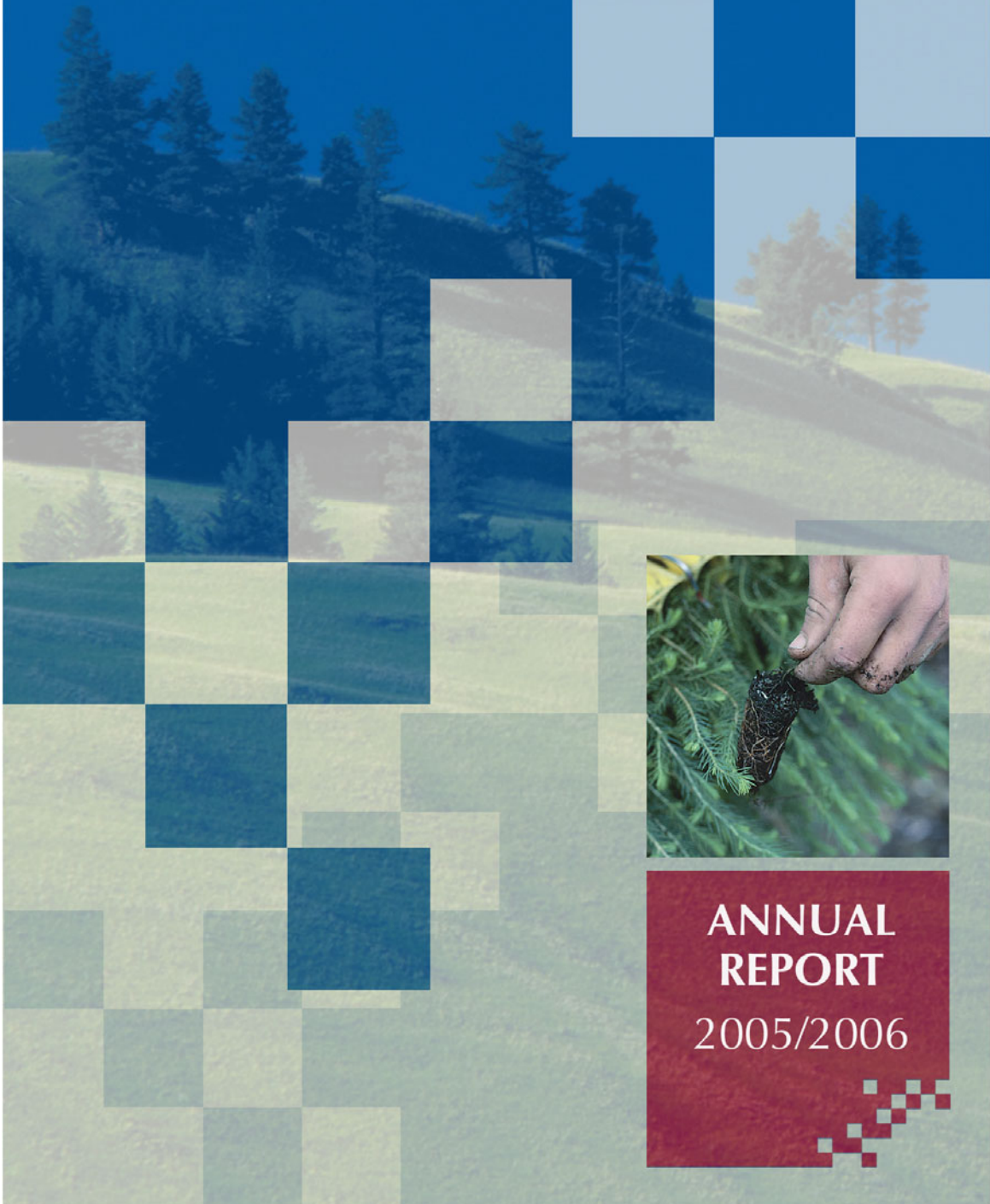


FIA Forest Investment Account
Forest Science Program



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More information on the FIA Forest Science Program can be found at
<http://www.FIA-FSP.ca>



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Message from the Deputy Minister

I am pleased to receive this second annual report of the FIA Forest Science Program (FIA-FSP), one of the six programs funded under the Forest Investment Account to promote sustainable forest management in British Columbia. This document reports on progress towards the goals of the FIA-FSP.

Fiscal year 2005/06—the second full year in which the FIA-FSP was guided by the Forest Science Board and administered by PricewaterhouseCoopers—was another success. By focusing on applied research and extension in sustainable forest management and improving timber growth and value, the FIA-FSP is helping to achieve government's goal of providing diverse and sustainable forest and range values for British Columbia.

Major effort this fiscal year was devoted to the selection of projects to be funded in 2006/07. Through its Call for Proposals process, the Board approved over \$12 million in research for 2006/07, which included \$1.56 million federal funding for research related to mountain pine beetle (MPB). Another \$2.37 million was allocated to extension activities managed by FORREX, of which \$0.39 million focused on extension related to MPB.

I am particularly pleased with the Board's commitment to build user interests into all aspects of the program, and to the continuous improvement of FIA-FSP processes.

In November 2003, I appointed a 12-member Forest Science Board (FSB) drawn from industry, governments, and the forest science community to advise on strategies and priorities for the FIA-FSP. In recognition of the increasing role of First Nations as users and providers of forest science, I have asked the Board's advice on adding two First Nations seats to the Board in 2006/07. I look forward to the expanded Board's guidance on how to integrate First Nations interests in the FIA-FSP.

I extend my sincere thanks to the Board and its Chair, Dr. Bill Bourgeois, as well as to the members of the three Program Advisory Committees (PACs) for their significant efforts and achievements in building the FIA Forest Science Program.



Doug Konkin
*Deputy Minister,
BC Ministry of
Forests and Range*

Message from the Forest Science Board Chair



Bill Bourgeois
*Chair, Forest
Science Board*

The success of the Board and its committees in building the FIA-FSP can be attributed once again to the commitment of those involved in guiding and implementing the program. These individuals have, together, created an efficient and respected mechanism for soliciting research and delivering knowledge to the policy-makers and practitioners responsible for sustainably managing British Columbia's forest and range lands.

Our significant accomplishments in 2005/06 include:

- completing 10-year strategies for the Sustainability and Timber Growth and Value research programs to guide the annual priority-setting process for research activities
- collaborating with FORREX on development of a provincial forest extension program to deliver existing and new information resulting from research to users
- refining bylaws and terms of reference for the Board and Program Advisory Committees (PACs)
- developing a logic model, business map, and preliminary performance measures consistent with the *FIA-FSP Strategic Plan 2004-2008*
- continuously improving the Call for Proposals process
- leveraging over \$1.5 million in cash and over \$7 million of in-kind support for research and extension related to sustainable forest management
- accepting responsibility for administering \$5.5 million in federal funds for mountain pine beetle biophysical research and development for the three fiscal years 2005 through 2008
- achieving a \$3.7 million increase in funding for the FIA-FSP, and preparing a business plan for the allocation of over \$16 million (including \$1.97 million in MPB funds) in 2006/07
- raising awareness of the FIA-FSP through development of a public Website (www.fia-fsp.ca), articles, displays, and presentations to external audiences.

I commend the members of the Board, its Program Advisory Committees, and Working Groups; and the staff from the Ministry of Forests and Range, PriceWaterhouseCoopers, and Cortex Consultants Inc., for their combined efforts in making the FIA-FSP a success.

It has been my pleasure to chair this capable team in 2005/06.



1 FIA–Forest Science Program

1.1 Context

The Forest Investment Account (FIA) is a provincial government mechanism for promoting sustainable forest management in British Columbia. It has six programs: Crown Land Use Planning, Forest Science, Land-Base Investment, Market Development, Small Tenures, and Tree Improvement.

The FIA Forest Science Program (FIA–FSP) funds forest science initiatives that address the critical knowledge needed to enable science-based sustainable management of British Columbia’s forest resources. The program focuses on applied research in the areas of practising sustainable forest management (SFM), improving timber growth and value, and using forest science results more effectively through extension.

This annual report describes progress on work outlined in the 2005/06 Business Plan. Section 1 presents an overview of the FIA–FSP. Section 2 discusses the participation by cooperator organizations and fund recipients. Section 3 reports progress, with budgets and actual expenditures; and Section 4 highlights work in the year ahead.

Crown Land Use Planning
Forest Science
Land-Base Investment
Market Development
Small Tenures
Tree Improvement

1.2 Forest Science Board

The Forest Science Board (FSB) is a voluntary advisory body that comprises users and providers of scientific knowledge drawn from industry, governments, and academic and private research organizations. The Board advises the Deputy Minister of Forests and Range on FIA–FSP strategies and program improvements, and champions the program by communicating its achievements.

The Board provides a forum for those interested in forest research and extension to set goals and oversee the development of programs and projects to achieve these.

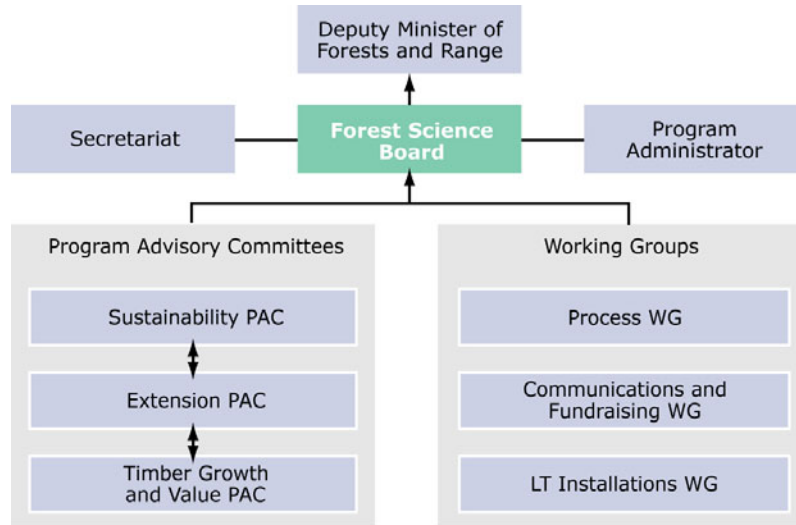
Two types of committees support the Forest Science Board:

- *Program Advisory Committees (PACs)*, consisting of industry, government, and agency representatives, offer strategic advice and recommend funding priorities for their respective programs.
- *Working Groups (WGs)* are established as needed to advise about specific issues. In 2005/06, WGs offered advice on continuous improvement and FIA–FSP communications and fundraising.

❖
*The FIA–FSP funds
 research and
 extension activities
 to improve
 management of
 BC’s public forest
 lands*

Figure 1 illustrates the relationships between the Board and its committees, and the development of the FIA–FSP strategic and business plans.

Figure 1 Relationships between Forest Science Board and committees.



A Secretariat (Cortex Consultants Inc.) supports the Board and PACs. A Program Administrator (PricewaterhouseCoopers) oversees implementation of the FIA–FSP and audits FIA–FSP projects.

1.3 Planning Framework

The Forest Science Board and its committees focus research and extension on high priority areas that address user needs.

The FIA–FSP planning framework involves users and providers of scientific knowledge in defining and ranking the research needed to answer key resource management questions, as well as the recommended methods for getting this information to practitioners.

Long-term Strategies

The *FIA Forest Science Program Strategic Plan 2004–2008* sets out the vision, strategic goals, structure, planning framework, themes, and cooperative principles of the FIA–FSP.

The FIA–FSP has five overarching strategic goals:

1. Improve science-based knowledge in support of sustainability
2. Improve science-based knowledge in support of improving timber growth and value
3. Guide development of a provincial forest extension program that includes FIA–FSP extension

❖
*The FIA–FSP
reflects the
information needs
and priorities of
those who plan and
manage BC’s public
forest lands*

4. Develop an efficient and effective process for determining annual research and extension priorities
5. Encourage sufficient stable funding to meet the needs of the FIA–FSP.

Component strategies for the Sustainability, Timber Growth and Value, and Provincial Forest Extension Programs outline the structure and methods to achieve each program’s strategic goals.

In August 2005, the Forest Science Board approved the Sustainability and Timber Growth and Value 10-year program strategies outlining broad direction for research to the year 2016. In January 2006, the Board received a draft five-year Provincial Forest Extension Program (PFEP) strategic plan from FORREX, the provincial extension provider.

Annual Priorities

The PACs participate in annual planning processes to define broad regional priorities for research and extension. Following Board review and approval, the approved priorities shape the Research Call for Proposals and the PFEP workplan.

Members of the two research PACs (Sustainability and Timber Growth and Value) solicited input from their geographical and sector constituencies to identify priority research topics for the 2006/07 Call for Proposals. FORREX worked with regional steering committees and subject area working groups to identify and rank critical knowledge gaps for each of the six subject clusters in the PFEP.

Call for Proposals

The Research Call for Proposals, issued each fall by the FIA–FSP Program Administrator, follows a two-stage competitive process, based on research priorities set by the Forest Science Board. In the first stage, proponents submit a letter of intent (LOI) that briefly describes the proposed project. The LOI review assesses the proposal ideas against FIA–FSP strategies and priorities. Proponents whose LOIs pass the first phase are invited to submit a detailed full proposal (second stage). The full proposal review evaluates the proponent team, proposed methodology, and scientific merit of the project.

Expert review committees evaluate all proposals, following criteria consistent with FIA–FSP objectives. Based on these recommendations and PAC priorities, the Board recommends the allocation of available funds to research and extension projects. When approved by the Deputy Minister of Forests and Range, these recommendations constitute the annual FIA–FSP Business Plan.

Most funds are allocated to single- and multi-year projects that address the annual priorities set by the Forest Science Board. A small portion of funds is available for other (proponent-driven) projects that fall within the Sustainability and Timber Growth and Value program areas, but not on topics identified as priorities. Over time, the Board’s goal is to balance funding between the Sustainability and Timber Growth and Value Programs, while funding projects of one to three years.



The annual Call for Proposals is based on PAC-defined research priorities



Projects lasting one to three years are funded to deliver results in the near and medium terms

Funding Categories

In 2005/06, the Board approved funding for:

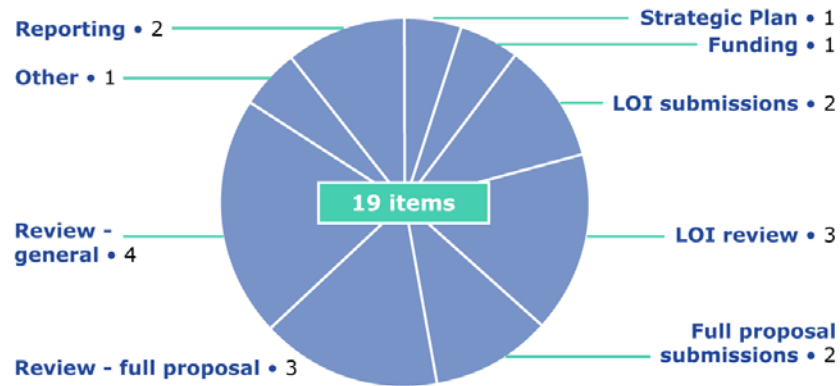
- short- and long-term research to address issues related to sustainable forest management and improving timber growth and value
- a provincial forest extension program to deliver existing and new knowledge to practitioners
- infrastructure maintenance activities on selected long-term research installations that support short- and long-term research projects.

In August 2005, the Board accepted responsibility for administering \$5.5M (over three years) of the federal funding to assist British Columbia in combating the mountain pine beetle (MPB) infestation. In 2005/06, \$179,653 was invested in seven MPB-related research projects on topics including: regeneration and stand structure following MPB infestation in the Sub-Boreal Spruce biogeoclimatic zone; determination of the impact of MPB-killed forest and elevated harvesting on snow accumulation, melt, and peak flow; species-specific responses to climate/microenvironment change in MPB-affected stands; soil disturbance on MPB-harvested areas; success rate of MPB attack in young stands; and maximization of log truck efficiency when transporting logs from MPB-killed stands.

Continuous Improvement

The Board is committed to continuous improvement of the FIA–FSP annual planning and Call for Proposals processes through feedback from proponents and proposal reviewers. In 2005/06, the Board addressed 19 items identified by participants in 2004/05 (Figure 2). Most of the resulting actions were incorporated into the 2006/07 Call for Proposals.

Figure 2 Continuous improvement items in 2005/06, by topic.



2 Program Participation

2.1 Cooperators and Recipients

The FIA-FSP is positioned to develop knowledge and deliver results to those who manage British Columbia's forest lands. Consequently, industry, consultants, provincial and federal governments, universities, research institutes, and other agencies play a key role in defining research and extension needs, and delivering projects.

Figures 3 and 4 show the number and value of projects by categories of recipients in the Sustainability and Timber Growth and Value Programs. Note that the provincial government category represents projects led by the province with frequent collaboration by universities and consultants.

Figure 3 Sustainability Program 2005/06 – number and value of projects, by recipient categories.

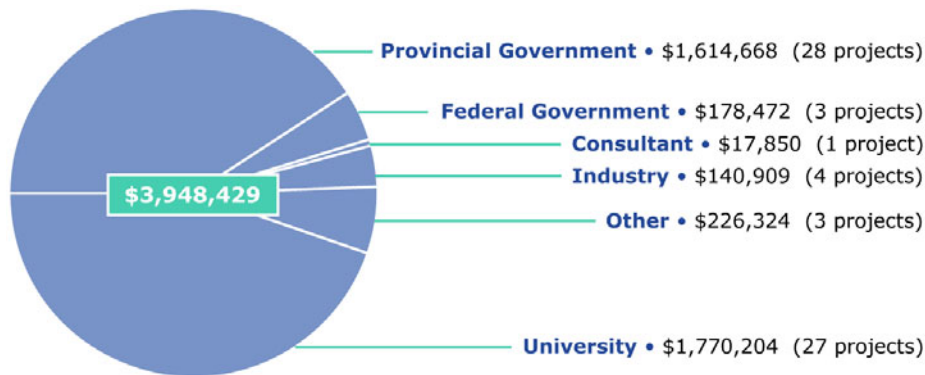


Figure 4 Timber Growth and Value Program 2005/06 – number and value of projects, by recipient categories.

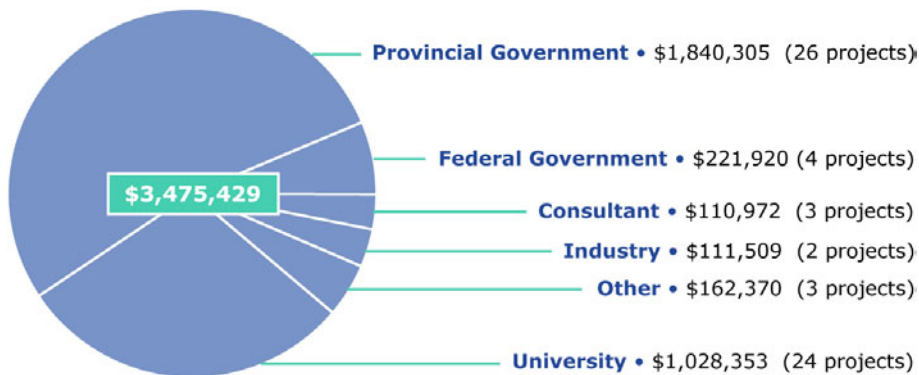
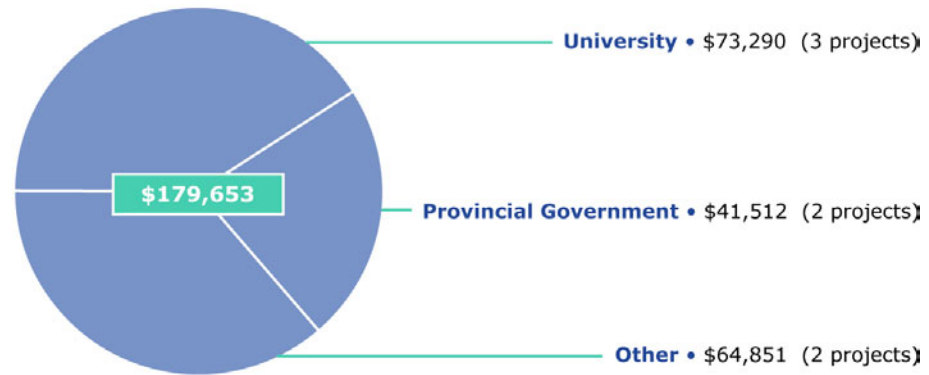


Figure 5 shows the number and value of mountain pine beetle-related research projects by categories of recipients.

Figure 5 Number and value of MPB projects, by recipient categories.



As shown in Figure 6, some 84% of FIA-FSP research project funds were allocated to projects led by researchers at universities and the provincial government (Ministry of Forests and Range and Ministry of Environment). The provincial government category represents projects led by the province with frequent collaboration by universities and consultants.

Figure 6 Percentage of total research funds allocated in 2005/06, by recipient categories.

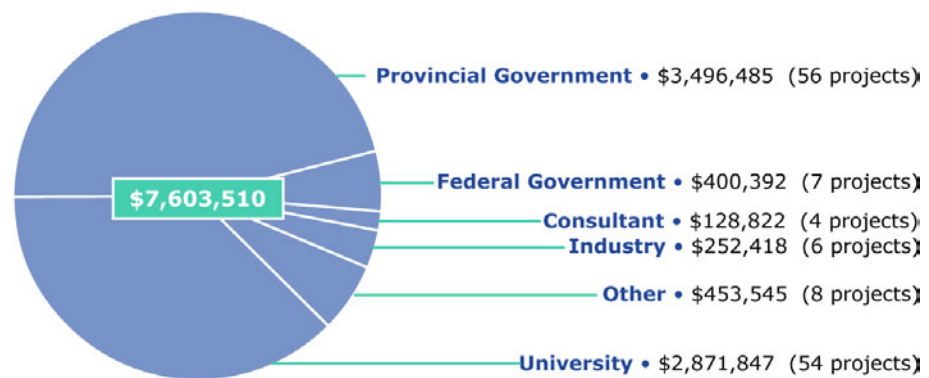
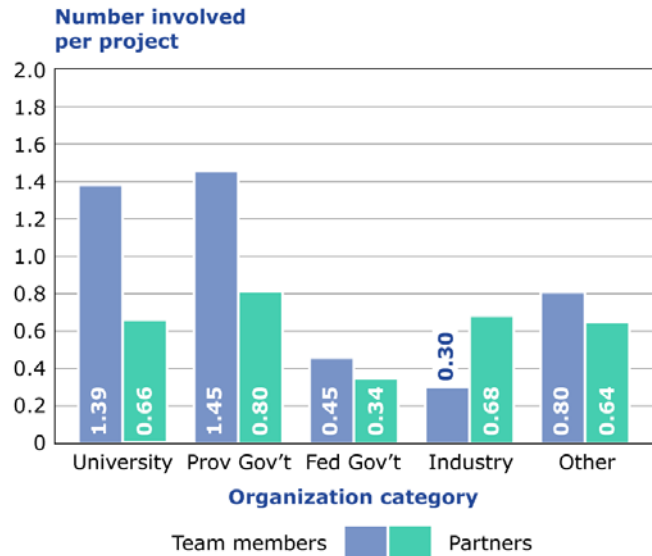


Figure 7 quantifies the type of participation in projects by recipient categories. In 2005/06, the provincial government was the frontrunner in the number and value of projects led (Figure 6), number of team members and partners (Figure 7), and in-kind contributions to projects (Figure 9). Universities took second place in levels of participation.

While the forest industry led only 3% of projects funded (Figure 6), and had the lowest level of participation as team members (Figure 7), it had the second highest level of participation as partners (Figure 7), and was the second highest contributor of cash per project to the projects in which it was involved (Figure 9).

Figure 7 Number of team members and partners per project in 2005/06, by recipient categories.



◆
Projects reflect varied involvement from provincial and federal governments, universities, the forest industry, and consultants

2.2 Leveraged Investments

The Forest Science Board promotes collaboration among research and extension institutions and programs to increase synergies and leverage funding for projects of common interest.

In 2004/05, FIA–FSP investments of \$9.75 million leveraged almost \$1.3 million in cash and \$5.9 million of in-kind contributions from other organizations and programs (Figure 8). In 2005/06, FIA–FSP investments of \$10.4 million leveraged over \$1.5 million in cash and \$7.1 million of in-kind contributions.

Figure 9 shows the 2005/06 leveraged contributions for research and extension investments. Figure 10 shows the average value of cash and in-kind contributions per research project, by contributing agency.

Figure 8 Cash and in-kind contributions leveraged by FIA-FSP investments in 2004/05, 2005/06.

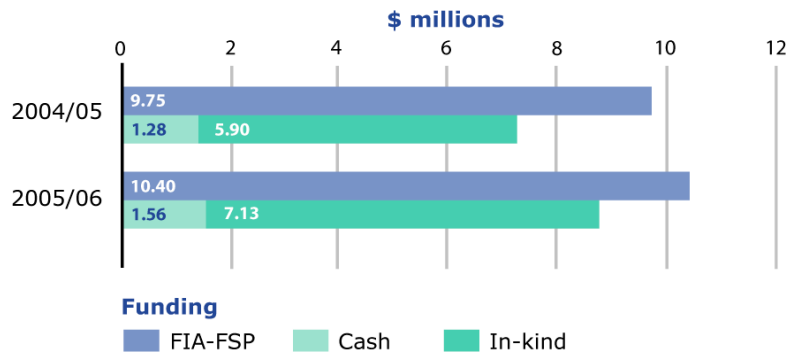


Figure 9 Leveraged contributions for research and extension investments funded by FIA-FSP in 2005/06.

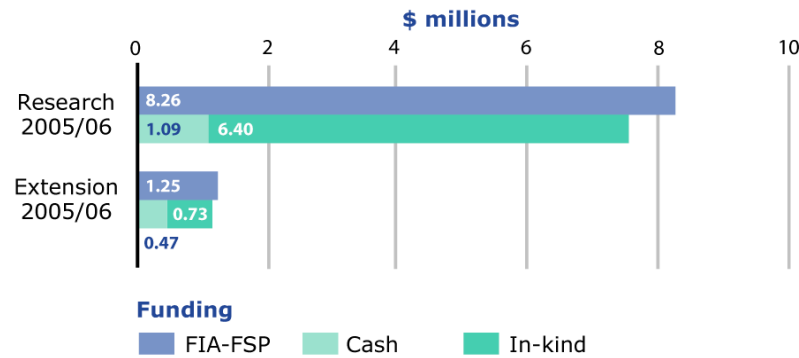
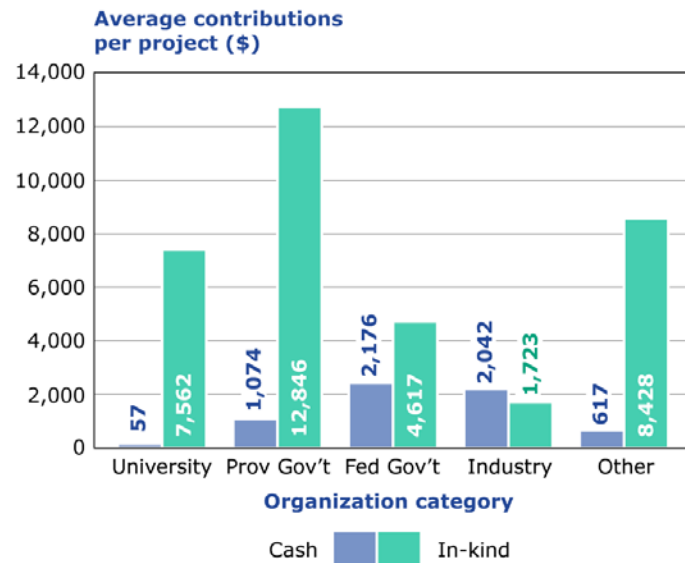


Figure 10 Value of cash and in-kind contributions to research projects funded by FIA-FSP in 2005/06, by contributing agency.





3 Program Progress 2005/06

3.1 Budgets and Expenditures

Table 1 summarizes the FIA–FSP budget and expenditures for 2005/06. It does not include the in-kind, staff, and other substantial inputs by industry, government, institution, academic, and consultant cooperators who contribute to the success of the program.

Table 1 FIA–FSP budget and actual expenditures in 2005/06

Activity	Budget (\$)	Actual (\$)
Research Projects (Call for Proposals)	8,280,170	8,053,188
MPB Projects	350,000*	179,653
Research Partnerships (Canadian Forest Innovation Council)	25,500	25,500
Program-level Extension (FORREX)	1,250,000	1,250,000
Program Development (Forest Science Board)	261,330	253,502
Program Administration and Audits (PricewaterhouseCoopers, Ministry of Forests and Range)	665,000	641,278
Total	10,832,000	10,403,121

* Note that MPB funding from the Canada–BC Implementation Strategy was not provided to FIA–FSP until August 2006. The FIA–FSP budget approved in the 2005/06 Business Plan (March 2006) was \$10,482,000.

3.2 Research

The FIA Forest Science Program funds research to support sustainable forest management in British Columbia through:

- research programs on sustainability and timber growth and value
- infrastructure maintenance (site maintenance, core monitoring, and knowledge asset protection) on key provincial long-term research installations (LTRIs)
- partnerships and collaborative projects with other agencies and research networks.

In 2005/06, 135 projects totaling approximately \$7.6 million were implemented, representing 92% of research expenditures. Total spending on research, including projects, LTRI maintenance, and partnerships was \$8,258,341 (Table 2).

Table 2 summarizes the research expenditures in 2005/06. Some 76% of Sustainability funds and 68% of Timber Growth and Value funds were allocated to multi-year projects continuing from fiscal year 2004/05. The approximately \$2 million available for new research projects in 2005/06 was allocated roughly equally to the two programs, with more funding to new multi-year projects.

Table 2 FIA–FSP research budget allocation and expenditures 2005/06

Program area	Budget (\$)	Actual (#)	Actual (\$)	Actual (\$)
Sustainability Program		65		3,919,029
Continuing multi-year projects	3,203,375	42	2,985,415	
New multi-year projects	517,810	10	462,296	
Single-year projects	487,332	13	471,318	
Timber Growth and Value Program		60		3,391,612
Continuing multi-year projects	2,159,390	39	2,307,673	
New multi-year projects	722,113	12	685,287	
Single-year projects	407,102	9	398,652	
Proponent-driven Projects	116,340	3		113,216
MPB Projects		7		179,653
Long-term Research Installation Maintenance	666,708			629,331
Research Partnerships	25,500			25,500
Total		135		8,258,341

Table 3 shows the program expenditures by project duration. In keeping with the nature of research, and lag between setup and the achievement of results, the largest proportion of funds in each program was allocated to three-year projects (73% Sustainability, 64% Timber).

Table 3 Number and value of research projects funded in 2005/06, by duration and program

Project duration	Sustainability		Timber		Proponent		MPB		Totals
	#	Value (\$)	#	Value (\$)	#	Value (\$)	#	Value (\$)	Value (\$)
3 year	37	2,860,424	33	2,184,100	0	0	0	0	5,044,524
2 year	15	587,287	18	808,860	1	19,084	0	0	1,415,231
1 year	13	471,318	9	398,652	2	94,132	7	179,653	1,143,755
Total	65	3,919,029	60	3,391,612	3	113,216	7	179,653	7,603,510



Sustainability Program

The Sustainability Program focuses on research to improve:

- understanding and modeling the relationships among ecosystem structure, biodiversity, and habitat values; and the effects of natural disturbance and human activities on ecosystems
- identification and monitoring of sustainable forest management indicators, functional targets, and thresholds
- effectiveness of mandated policies and practices.

In 2005/06, almost \$4 million was invested in 68 projects under the FIA–FSP Sustainability Program (Table 4). Sixty-seven projects, valued at \$3.95 million, addressed priority themes and topics; two of these focused on research related to MPB. One unclassified project addressed synthesis and extension of research on the nutritional sustainability of variable retention harvesting.


*Sustainability
 research seeks to
 improve
 understanding and
 management of
 forest ecosystems*

Table 4 Sustainability Program 2005/06 projects, by themes and topics

Research theme, topic	Annual priorities		MPB		Proponent	
	No.	Value (\$)	No.	Value (\$)	No.	Value (\$)
1.0 Ecosystem structure, function and processes, and biodiversity related to forest management	37	2,282,885	2	34,421		
1.1 Riparian ecology and management of small streams	4	239,391	1	15,519		
1.2 Soil biology	5	480,161				
1.3 Coarse filter approach to maintaining biodiversity at the landscape scale	5	225,016				
1.4 Effectiveness of stand-level structure and habitat in maintaining biodiversity	9	371,944				
1.5 Natural disturbance ecology	1	69,799				
1.6 Watershed function	11	807,011	1	18,902		
1.8 Ecological restoration	1	9,564				
Other	1	80,000				
2.0 Decision support tools for sustainable forest management	1	120,942				
2.1 Habitat supply modeling	1	120,942				
3.0 Sustainable forest management indicators, targets, and monitoring systems	15	734,807				
3.1 Development of indicators and monitoring systems	12	580,018				
3.2 Indicator targets and functional thresholds of sustainability	3	154,789				
4.0 Scientific information to inform policy, regulations, and FRPA practice requirements	12	780,394				
4.1 Species at Risk Recovery Research	12	780,394				
Unclassified					1	29,400
Total	65	3,919,029	2	34,421	1	29,400

Timber Growth and Value Program

The Timber Growth and Value Program focuses on research to improve:

❖
Timber growth and value research seeks to improve the volume and value of wood produced

- prediction of tree and stand growth, and wood properties and values under various management regimes and for different stand types
- forecasting of timber losses and stand development following natural disturbances
- evaluation and development of management regimes for co-production of timber and non-timber values
- effectiveness of mandated policies and practices.

In 2005/06, over \$3.6 million was invested in 67 projects in the Timber Growth and Value Program (Table 5). Sixty projects, valued at \$3.34 million, addressed priority themes and topics including MPB. Seven unclassified projects addressed other aspects of timber growth and value.

Table 5 Timber Growth and Value Program 2005/06 projects, by themes and topics

Research theme, topic	Annual priorities		MPB		Proponent	
	No.	Value (\$)	No.	Value (\$)	No.	Value (\$)
1.0 Basic research on tree growth and stand development	16	758,644				
1.1 Complex stands (including partial cutting, variable retention)	13	641,481				
Other	3	117,162				
2.0 Design and analysis of silvicultural systems	14	1,033,434				
2.1 Complex stands (including partial cutting, variable retention)	6	446,477				
2.2 Even-aged stands	1	17,249				
Other	7	569,707				
3.0 Growth and yield modeling/predictions	8	515,618				
3.1 Complex stands (including partial cutting, variable retention)	8	515,618				
4.0 Timber losses to environmental and biotic factors	16	834,749	2	54,388		
4.1 Stand and forest dynamics following MPB	7	399,444	2	54,388		
4.2 Estimating stand-level losses (other than MPB)	8	407,581				
Other	1	27,724				
7.0 Climate change	2	66,640				
8.0 Forest harvesting and engineering studies on salvaging MPB-killed timber			2	76,846		
Unclassified	4	182,527	1	13,999	2	83,816
Total	60	3,391,612	5	145,232	2	83,816



Long-term Research Installations

Long-term research installations (LTRIs) are physical sites specifically designed and established to enable long-term experiments addressing resource management issues and treatment options. On these sites, potentially one or more decades are needed to properly assess biophysical responses. Annually funded research programs often lack the resources to maintain these valuable installations, which then become vulnerable to damage and loss over time.

LTRI funding is intended to protect the infrastructure of key installations and maintain them for use by the scientific community for further short- and long-term experiments.

LTRI funding will focus on research installations where there has been considerable investment and where there is risk of losing the investment if infrastructure and core activities are not funded. LTRI funding is not meant to replace funding from other sources or direct costs associated with experiments at the sites.

In 2005/06, almost \$630,000 was allocated to infrastructure maintenance activities on 40 LTRIs that support the priority research themes in the Sustainability and Timber Growth and Value Programs. These included installations such as the Carnation Creek Watershed, Alex Fraser Research Forest, Upper Penticton Creek Watershed, Sicamous Creek, and Opax Mountain.

Research Partnerships

Research partnerships are one means to focus scarce funds on common areas of interest. The FIA-FSP funds other research initiatives to link with researchers and leverage funding at the provincial and national levels.

In 2005/06, the FIA-FSP contributed \$25,500 to the Canadian Forest Innovation Council (CFIC). The CFIC is a national initiative of executives from industry and the federal and provincial governments that encourages innovation in the forest sector to promote industry profitability, environmental quality, and community sustainability.

The 2004/05 grant to the Sustainable Forest Management Network (SFMN) was still in effect for 2005/06. The SFMN is a non-profit Canadian network of research Centres of Excellence, based at the University of Alberta, in Edmonton, Alberta, Canada. Its mission is to deliver an internationally recognized, interdisciplinary program that undertakes relevant university-based research; develop networks of researchers and partners; offer innovative approaches to transferring knowledge; and train scientists and advanced practitioners to meet natural resource management challenges.



LTRIs provide opportunities for collaborative research and the collection of long-term data



Research partnerships promote collaboration and the leveraging of funds

3.3 Extension

The Provincial Forest Extension Program (PFEP) fosters collaboration to address the extension needs of the FIA Forest Science, Land Base Investment, and Small Tenures Programs. As the provincial forest extension provider, the Forest Research Extension Partnership (FORREX) coordinates and undertakes activities to:



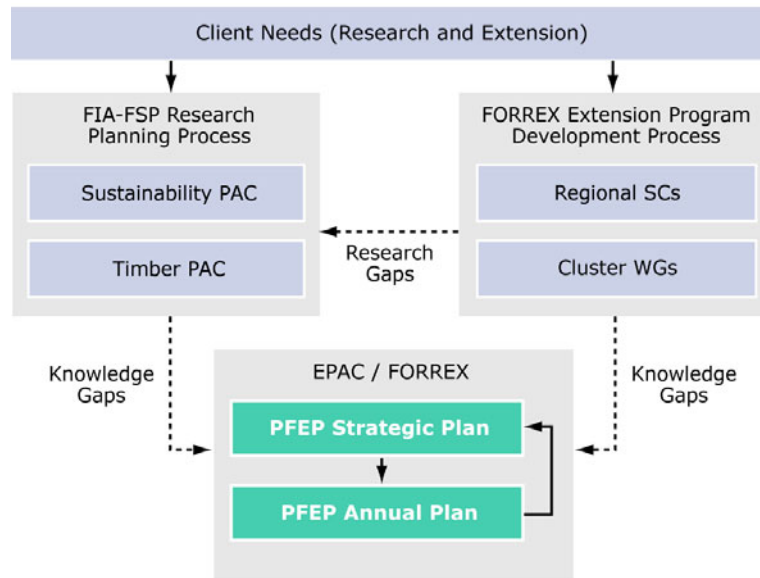
Forest extension delivers existing and new knowledge to practitioners

- synthesize existing knowledge on key forest policy, management, and practice issues
- identify user needs for information
- provide users with the knowledge and tools they require to sustainably manage Crown forests.

In 2005/06, the Extension PAC (EPAC) worked closely with FORREX on development and implementation of a five-year strategy (2005–2010) and workplan (2006/07) for the Provincial Forest Extension Program.

The PFEP capitalizes on the FIA–FSP research planning process and existing FORREX infrastructure for extension program development and evaluation, as well as other sources of input on client needs for research and extension (Figure 11). This broad input and guidance ensure that the PFEP responds to community needs and priorities and collaborates where possible with other initiatives.

Figure 11 Provincial Forest Extension Program planning framework.





In the FIA–FSP research planning process, Program Advisory Committees (PACs) for Sustainability (SPAC) and Timber Growth and Value (TPAC) identify knowledge gaps and set research priorities. The research funded through FIA–FSP generates new knowledge, which is extended to clients through extension activities within research projects, and through the PFEP and other venues.

The FORREX extension program uses Regional Steering Committees (SCs) and Cluster Working Groups (WGs) to identify and rank critical knowledge gaps from the needs identified by clients and FIA–FSP advisory processes.

The EPAC and FORREX integrate research information and knowledge gaps in developing the PFEP Strategic Plan and PFEP annual business plans. To strengthen the link between the two processes, and to ensure that knowledge gaps are addressed in both research planning and extension, FORREX extension specialists participate in SPAC and TPAC research planning and priority setting. FORREX also participates on the EPAC.

The \$1.25 million invested in the PFEP in 2005/06 supported a range of extension activities and products, including surveys, articles, peer-reviewed papers (LINK, Streamline, JEM), listserv announcements, workshops, field tours, presentations, site visits, outreach, problem-solving sessions, and conferences. These activities focused on priority management issues in ecosystem and biodiversity conservation, forest dynamics and integrated resource management, socio-economics, information and knowledge systems, and watershed management.



To strengthen the link between research and extension planning, extension specialists participate in the SPAC and TPAC.

3.4 Management

The Forest Science Board achieved many of its 2005/06 strategic goals for managing the FIA-FSP:

Governance	<p>Refined its draft bylaws and terms of reference for Board and PACs and their relationship to one another</p> <p>Commissioned a study to clarify the requirements, opportunities, limitations, and implications associated with various options for FIA-FSP governance</p>
Program Development	<p>Completed 10-year strategies for the Sustainability and Timber Growth and Value Programs (2005-2015)</p> <p>Accepted responsibility for administering the \$5.5 million (over three years) in federal funds for MPB biophysical research and development, including engineering</p> <p>Developed logic model, business map, and performance measures consistent with the FIA-FSP Strategic Plan 2004-2008</p> <p>Commissioned special studies on the benefits of research, the status and recent trends in forestry-related research in Canada in 2005, a problem analysis on the effect of invading species on Species at Risk, and investigation of a business plan approach for funding growth and yield modeling research</p>
Program Execution	<p>Improved the Call for Proposals process based on proponent and user feedback</p> <p>Identified research priorities for the Call for Proposals 2006/07</p> <p>Prepared the 2006/07 FIA-FSP Business Plan</p>
Program Communications	<p>Developed a communication strategy and public Website for the FIA-FSP (www.fia-fsp.ca)</p> <p>Prepared articles, exhibited the FIA-FSP display, and made presentations on the FIA-FSP to a range of user audiences</p> <p>Published the 2004/05 FIA-FSP Annual Report</p> <p>Initiated a requirement for research proponents to prepare an extended research abstract for communication and extension purposes</p>



3.5 Administration

PricewaterhouseCoopers (PwC) was responsible for administering the FIA-FSP program and auditing projects. The Ministry of Forests and Range administered the Program Administrator, Secretariat, and other contracts undertaken for the FIA-FSP, as recommended by the Forest Science Board.

Project Monitoring

PwC implemented a Web-based Research Investment Management System (RIMS) to facilitate quarterly project performance and financial reporting by recipients. The system also allows recipients to request amendments or notify of any project changes on an ongoing basis.

Recipients submitted amendments for any major changes to approved workplans to PwC for review and approval. PwC ensured that recipients submitted required reports to the Ministry of Forests and Range library and that extension commitments were met.

Auditing

Performance audits used objective measures to ensure that projects achieved the agreed-upon milestones and outcomes. Financial audits included a review of policies, procedures, and controls established by recipients related to FIA-FSP funds, and a review of project cost statements to ensure consistency with and applicability to the individually approved project, the Recipient Agreement, and the Cost Guidelines.

Project performance and finances were audited at the end of the third quarter (December 31, 2005) and of the fiscal year (March 31, 2006).

Performance audits were conducted at nine recipient organizations on 32 projects valued at \$2,040,138. This represents an audit coverage of some 17% of projects and 21% of project expenditures.

Twelve interim and year-end financial audits were conducted at nine recipient organizations on the same projects that were audited for performance. Financial audits reviewed the internal controls for FIA-FSP funds and the original documentation to ensure compliance with the recipient agreement, approved workplan, and cost guidelines.

Table 6 summarizes the audit findings with respect to non-conformance (failure to meet one or more terms of the workplan and/or recipient agreement); opportunities for improvement (isolated instances of low-risk, non-conformance with project workplans); and above-average management practices.

Table 6 Audit results 2005/06

Category	Performance audit (32)	Financial audit (12)
Major non-conformance (Failure to meet project objectives)	Three instances Recipients are required to complete the project at their own cost.	One instance Related to administrative costs; action plan developed and costs recovered.
Minor non-conformance (Deviations from the recipient agreement but project objectives met)	Two instances Related to increases in the recipient's subcontractor's rate between proposal submission and actual charges.	26 instances Most were administrative (e.g., calculation of salary and GST). Other instances related to ineligible expenditures.
Opportunities for improvement (Recipient's forest science management practices)	Three instances Related to potential improvements to non-FIA-FSP funded components of projects, and reporting minor changes to the project plan to PwC.	Three instances Related to potential improvements in administration (e.g., budget documentation).
Good management practices (Above average)	Three instances	No instances

The Program Administrator is required to subcontract at minimum 25% of the annual audits. In 2005/06, PwC outsourced 18 performance audits, representing 41% of the 44 total audits.

4 The Year Ahead

In 2006/07, the Board will continue to address escalating issues related to the mountain pine beetle epidemic and will investigate other emerging trends and issues requiring research. It will also pursue the integration of First Nations interests in the FIA-FSP. The provincial forest extension provider will complete the Provincial Forest Extension Program strategic plan, and the three Program Advisory Committees will continue to improve their business planning processes.

Governance	Add two First Nations representatives to the Forest Science Board
Program Development	<p>Investigate means of incorporating First Nations interests into the FIA-FSP</p> <p>Commission studies to improve understanding of recent trends in forestry-related research in British Columbia and Canada, of emerging issues affecting BC forests, and of the need for long-term research</p> <p>Conduct analyses to better identify priority knowledge gaps</p> <p>Develop a management issues hierarchy to guide future development of research and extension strategies</p>
Program Execution	<p>Continue to improve the FIA-FSP Call for Proposals process based on proponent and user feedback</p> <p>Monitor and refine preliminary performance measures for the FIA-FSP</p>
Communications	<p>Maintain the FIA-FSP Website (www.fia-fsp.ca); prepare articles, presentations, and a brochure to raise awareness of FIA-FSP; exhibit display at appropriate venues</p> <p>Publish the FIA-FSP 2006/07 Business Plan and 2005/06 Annual Report</p> <p>Identify and communicate key successes and benefits of program</p> <p>Meet with senior government and industry officials to highlight strategic direction of FIA-FSP</p>

Forest Science Board 2005/06

Board Members	Affiliation	Representing
Bill Bourgeois (Chair)	New Direction Resource Management Ltd.	Forest Sector (Interior)
Ted Nash (Vice-Chair)	Ministry of Forests and Range	Provincial Government
Ralph Archibald	Ministry of Forests and Range	Provincial Government
Gerry Still	Ministry of Forests and Range	Provincial Government
Max Blouw	University of Northern BC	Forest Science Provider (Universities)
Randy Chan	Tolko Industries Ltd.	Forest Sector (Interior)
Gary Hogan	Canadian Forest Service	Federal Government
Diane Medves	Island Timberlands	Forest Sector (Coast)
Cindy Prescott	University of BC	Forest Science Provider (Universities)
Alex Sinclair	Forest Engineering Research Institute of Canada	Forest Science Provider (Private organization)
Art Tautz	Ministry of Environment	Provincial Government
Paul Wooding	Canfor Corporation	Forest Sector (Coast)

Ex-Officio Board Members

Michael Armstrong	PricewaterhouseCoopers	Program Administrator
Monty Locke	Ministry of Forests and Range	Ministry Designate for FIA-FSP
Steve Stearns-Smith	Stearns-Smith and Associates	Extension

Secretariat

Melissa Hadley	Cortex Consultants Inc.
Dan O'Brien	Cortex Consultants Inc.

Sustainability PAC

Name	Affiliation
Gerry Still	Ministry of Forests and Range (PAC Chair)
Bill Beese	Cascadia Forest Products
Phil Burton	Canadian Forest Service / University of Northern BC
Kristy Ciruna	Nature Conservancy of Canada
Pat Field	Independent
Gerry Fraser	International Forest Products Limited
Jerome Girard	Tolko Industries Ltd.
Ingrid Hedin	Forest Engineering Research Institute of Canada
Susan Leech	FORREX
Scott McNay	Wildlife Infometrics Inc.
Tom Millard	Ministry of Forests and Range
Dan Moore	University of BC (FRBC Chair)
Shawn Morford	FORREX
Bruce Morgan	Ministry of Environment
Geoff Scudder	University of BC emeritus
Art Tautz	Ministry of Environment (Board liaison)

Timber Growth and Value PAC

Name	Affiliation
Jack Woods	SelectSeed Company Ltd. (PAC Chair)
David Byng	Western Forest Products
Dave Conly	Tolko Industries Ltd.
Valerie LeMay	University of BC
Don McDermid / Ross Lennox	Canadian Forest Products
Diane Medves	Island Timberlands (Board liaison)
Darcy Mitchell	Royal Roads University
Guy Newsome	Ministry of Forests and Range
Barrie Phillips	Ministry of Forests and Range
Rob Scherer	FORREX
Nick Smith	Cascadia Forest Products
Steve Stearns-Smith	Southern Interior Growth & Yield Cooperative
Kathie Swift	FORREX
Ralph Winter	Ministry of Forests and Range
Rod Willis	Independent

Forest Extension PAC

Name	Affiliation
Steve Stearns-Smith	Stearns-Smith and Associates (PAC Chair)
Randy Chan	Tolko Industries Ltd.
Max Blouw	University of Northern BC
Jack Woods	SelectSeed Company Ltd.
Gerry Still	Ministry of Forests and Range

